



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/474,542	12/29/1999	ELWYN B. DAVIES	476-1884	2366

7590

03/22/2004

William M Lee Jr
Barnes & Thornburg
P O BOX 2786
CHICAGO, IL 60690-2786

EXAMINER

HA, YVONNE QUY M

ART UNIT	PAPER NUMBER
2664	10

DATE MAILED: 03/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/474,542

Applicant(s)

DAVIES, ELWYN B.

Examiner

Yvonne Q. Ha

Art Unit

2664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Claims 1-9 are pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4, 8, and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Riggan et al. (US Patent 6,490,252).

Referring to claims 1 and 8, Riggan discloses a method of operating a connectionless network (Figure 2, reference 305) to provide a priority routing service (col. 2, line) for traffic between a predetermined network user and a plurality of customers communicating with said user (Col. 4, Lines 45-46) via said network (Figure 2, reference 305), the network comprising a plurality of network elements and links between (Figure 2, references 204a, 204b), the method comprising: monitoring network to determine an actual, or expected, congestion (Col. 4, Lines 15-17; Figure 2, reference 206), maintaining an express route for carrying traffic (Col. 2, lines 51-59), the express route comprising one or more said links between two end elements (Figure 2, references 300a and 300b); identifying at one or both said end elements data packets originating from said user and destined for a said customer or data packets originating from a said customer

Art Unit: 2664

and destined for said user (Col. 2, lines 9-11) and diverting said packets along said express route (Col. 4, lines 48-55).

Referring to claim 2, Riggan discloses all aspects of the claimed invention and further teaches a route is bi-directional, both said end elements being arranged to identify and divert said packets (Col. 1, lines 58-61; Figure 2, references 300a and 300b; packets can be routed from end node 300a to node 300b and node 300b to 300a).

Referring to claim 3, Riggan discloses all aspects of the claimed invention and further teaches reserving bandwidth on said links forming said route (Col. 1, lines 54-57; Col. 2, lines 5-8).

Referring to claim 4, Riggan discloses all aspects of the claimed invention and further teaches a route has one end element adjacent or forming the network entry point of said user (Col. 1, lines 58-61; Figure 2, references 300a and 300b).

Referring to claim 9, Riggan discloses identifying elements of the network where traffic between user and customers is concentrated and selecting one of the identified elements where traffic is concentrated as one of the end elements of the express route (Col. 2, lines 5-17; Col. 4, lines 45-55).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2664

Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riggan et al. (US Patent 6,490,252) in view of Kodialam et al. (US Patent 6,538,991).

Referring to claim 5, Riggan discloses all aspects of the claimed invention and further teaches diverting step within one said end element such that data packets having a destination address corresponding to said user are diverted along said route (Col 2, lines 9-18) but fails to disclose the use of forwarding table. Kodialam discloses the use of forwarding table (Col. 10, lines 48-51). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Riggan diverting traffic upon notification from network manager to ensure quality of service with the teaching of Kodialam use of forwarding table constructed with information from network management system to store routing information based on destination addresses. One of ordinary skill in the art would have been motivated to combine the teaching of Riggan diverting traffic upon notification from network manager to ensure quality of service with the teaching of Kodialam use of forwarding table constructed with information from network management system to store routing information based on destination addresses because it allows for constrained based routing to be defined based on instruction by controller with information from network manager.

Referring to claim 6, Riggan discloses all aspects of the claimed invention and further teaches filtering data packets within the other said end element such that data packets are diverted along said route (Col. 2, lines 5-18) but fails to disclose the use of source address for routing. Kodialam discloses the use destination address in the forwarding table (Col. 10, lines 48-51). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Riggan diverting traffic upon notification from network

Art Unit: 2664

manager to ensure quality of service with the teaching of Kodialam use of forwarding table constructed with information from network management system to store routing information based on source addresses. One of ordinary skill in the art would have been motivated to combine the teaching of Riggan diverting traffic upon notification from network manager to ensure quality of service with the teaching of Kodialam use of forwarding table constructed with information from network management system to store routing information based on source addresses because it allows for constrained based routing to be defined based on instruction by controller with information from network manager.

Referring to claim 7, Riggan discloses a network element for use in a connectionless network (Figure 2, reference 305) comprising a plurality of network elements and links there between (Figure 2, references 204a, 204b), the network element and an express route for carrying traffic between a predetermined network user and a plurality of customers (Col. 2, lines 51-59), the express route comprising one or more links between two end elements which bypasses a congestion point (Col. 4, lines 48-55), the network element comprising: means for routing data packets onto another element and filter means for identifying and diverting data packets having a source address corresponding to a user (Col. 2, lines 9-11), said identified packets being diverted to an element not specified by said routing means and forming part of an express route for said user (Col. 4, lines 48-55) but fails to disclose the use of destination address for routing. Kodialam discloses the use destination address in the forwarding table (Col. 10, lines 48-51). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Riggan diverting traffic upon notification from network manager to ensure quality of service with the teaching of Kodialam use of forwarding table

Art Unit: 2664

constructed with information from network management system to store routing information based on destination addresses. One of ordinary skill in the art would have been motivated to combine the teaching of Riggan diverting traffic upon notification from network manager to ensure quality of service with the teaching of Kodialam use of forwarding table constructed with information from network management system to store routing information based on destination addresses because it allows for constrained based routing to be defined based on instruction by controller with information from network manager.

Response to Arguments

5. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., IP as connectionless) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Regarding to argument on page 2, line 4, the applicant argued connectionless network such as IP and ATM is not connectionless. The Examiner disagrees due to the fact that the specification cited a connectionless is an example of an IP. The limitation of connectionless was never claimed as part of the invention. Therefore, the Examiner interpreted the connectionless network term to its broadest definition. According to Newton's Telecom dictionary, version 18th, the connectionless network is a communication between applications in which all data is exchanged during a single connection. There are characteristics of connectionless mode such as x.25, Frame Relay, and ATM, IEEE 802 LAN. Packet-switched network such as ATM (where each packet of data is independent and contains complete address and control information) is also defined as

Art Unit: 2664

connectionless network service. Regarding to argument on page 2, line 24, the applicant argued an express route is within the same network. The Examiner disagrees due to the fact that the claims 1 and 8 never claimed the limitation of within the same network. The claims stated "the express route comprising one or more links between two end elements which bypasses congestion point". Therefore, the Examiner interpreted to its broadest definition where the express route could be routing to a different network (i.e. external network). Regarding to argument on page 3, lines 11, the applicant argued Riggan does not teach monitoring congestion within the network. The Examiner disagrees due to the fact that the limitation monitoring was not claimed in claims 5 and 6, but instead claiming modifying a forwarding table and diverting the route. Therefore, the Examiner presented the prior art that teach forwarding table and diverting the route. Therefore, the rejections of these two claims are still valid. Regarding to argument on page 3, lines 24, the applicant argued Riggan does not teach filtering by identifying the data and then divert the data. The Examiner disagrees due to the fact that Riggan teaches identifying the user data according data types and quality of service threshold. Regarding to argument on page 4, lines 24, the applicant argued Riggan does not teach diverting traffic according to source address. The Examiner disagrees due to the fact that the limitation of claim 6 stated, "data packets having a source address corresponding to user are diverted". The examiner interpreted the limitation as mapping the source address corresponding to user, which implies the proper mapping between two nodes would meet some criteria related to a limitation or threshold of QoS. Riggan discloses identifying the user data at first node, identifying the QoS and route user data to second network only if the user data exceeded the threshold. The information used to predict when the usage exceeds the threshold includes the source of the user data and the type of

Art Unit: 2664

user data, which are being transmitted (col. 2, lines 18-36). Therefore, the rejection of claims 1-9 still hold.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Farris et al. (US Patent 6,574,216) discloses packet data network voice call quality monitoring
- Farris et al. (US Patent 6,154,445) discloses telephony communication via varied redundant networks
- Voelker (US Patent 6,370,112) discloses seamless path switchover in a connection-oriented packet network
- Shaffer et al. (US Patent 6,236,642) discloses network resource preservation
- Shirai et al. (US Patent 5,912,877) discloses data exchange, terminal accommodated in the same data communication system

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2664

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yvonne Q. Ha whose telephone number is 703-305-8392. The examiner can normally be reached on Monday-Friday 7a.m.-4p.m. Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ajit Patel can be reached on 703-308-5347. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

YQH


Ajit Patel
Primary Examiner